July 23, 2014

PRELIMINARY DRAFT LIST OF MAJOR LWG ISSUES FOR EPA'S FEASIBILITY STUDY DRAFT SECTION 1 TEXT

EPA provided a draft of Section 1 of the Revised Feasibility Study (FS) to the LWG on July 8, 2014. Consistent with the 30-day FS section review and resolution process developed by EPA, this document contains a preliminary draft list of major LWG issues for EPA's draft Section 1. This preliminary list was prepared to facilitate EPA and LWG discussions to resolve outstanding issues on EPA's draft section before the 30-day resolution period ends. As the LWG continues to review the draft section, additional or different issues could be identified. Also, the LWG has identified, and is continuing to review the text for factual, grammatical, and typographical errors that are not discussed here.

- 1. **Deletion of Conceptual Site Model (CSM)** Although EPA retained some references to a few CSM fate and transport processes, the bulk of the Draft FS CSM description was removed. Critical CSM information for FS alternative development and evaluation that was removed includes, but is not limited to, the following: 1) physical factors and processes (e.g., descriptions of bathymetry, deposition/erosion, debris, substrate types, and shoreline conditions); 2) site uses (e.g., channel and maintenance dredging areas); 3) human activities (e.g., vessel traffic patterns, propwash, and historical remediation); 4) chemical distributions; 5) biological habitats and restoration sites; 6) site sources; and 7) potential risks. EPA's CSM focuses on a cartoon from the draft FS, which is insufficient to convey the existence and interplay of these various CSM factors (as compared to the detailed CSM maps in Draft FS Figure 2.6-2, which were deleted). Also, the CSM discussion cannot be completely evaluated by the LWG in the absence of EPA's draft of Section 10 of the Remedial Investigation (RI).
- 2. **Deletion of Sediment/Water Background** EPA removed all descriptions of background conditions. Background conditions must be summarized in Section 1 to support the later FS discussion of primary remediation guidance concepts related to background. These guidance concepts include, but are not limited to, the following: 1) EPA does not normally set cleanup levels below background concentrations (EPA 2002); and 2) Remedial Action Objectives (RAOs) should reflect objectives that are achievable from the site cleanup (EPA 2005).
- 3. **Source Issues** Overall, the summary of sources is much less clear and factually inaccurate as compared to the Draft FS.
 - a. **Deletion of Source Control Inventory and Status** EPA removed the summary of the source control inventory and status information and any reference to the detailed inventory in Appendix Q that EPA directed the LWG to include in the Draft FS. This is critical information for context of the Revised FS that was prepared consistent with the most recent Oregon Department of Environmental Quality (DEQ) Milestone Report for Upland Source Control available at the time.
 - b. Inclusion of New Upland Groundwater Plume and Riverbank Contamination
 Text The LWG has the following two major concerns regarding this text:
 - First, the information lacks clarity and accuracy because the information sources used by EPA are not cited, the relationship between potential upland

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- sources and within-Site conditions is not explained, and there appear to be significant factual errors with regard to many of the upland sites discussed. EPA's new text replaces the source control inventory information, which was clearly based on and consistent with the DEQ Milestone Report and the findings there regarding the potential for upland sources to impact the Site.
- ii. Second, EPA presents this new information in the Site "Nature and Extent" section, even though this information pertains to upland sources that will not be addressed through the in-water remedies evaluated in the FS. Most of the information appears irrelevant to actual conditions and potential sediment remediation within the Site boundary and is not linked to known data on Site conditions. For example, EPA removed the Draft FS text about within-Site Transition Zone Water concentrations that provides the linkage between potential upland groundwater sources and actual Site conditions.
- c. **Deletion of Stormwater Sources** Although EPA's new text in Section 1.2.3 extensively discusses groundwater and river bank sources, stormwater sources receive no similar discussion. LWG recommends a balanced presentation of sources in Section 1.
- 4. Addition of Sediment and Water Exceedance Maps EPA has added new contaminant distribution maps that highlight "high concentration" sediment areas (e.g., red circles on maps) or exceedances of certain water quality criteria in surface water (colored dot maps). Given that neither of these methods is used later in the FS to determine active remediation areas, these presentations will necessarily conflict with later Remedial Action Level and Sediment Management Area depictions (in the case of sediments) and summaries of baseline risk assessment findings (in the case of surface water). Further, the term "high concentration" sediments is not defined and appears to be arbitrary, although no map is available to fully evaluate the actual results of this proposal. Showing contaminant distribution figures similar to the RI (e.g., concentration color ramps) instead would avoid confusion between these Section 1 maps and later determinations of remediation areas in the FS.
- 5. Early Action Data EPA indicates that early action data are included in the Revised FS. Per the LWG's July 9, 2014 Draft LWG Responses to EPA's Proposed Dredge Depth Approach, EPA's plan for including early action datasets in various FS evaluations is currently unknown. For example, EPA's Section 1 draft proposes to use RI figures that clearly do not include the early action data. The LWG is concerned that without a detailed data plan, it will be difficult to understand the following: 1) which evaluations are using the original FS database and which are using additional datasets; 2) what differences in various evaluation conclusions are caused by database differences versus technical issues; and 3) the causes of any differences between the findings in the Draft FS and Draft Final RI and those in the Revised FS.
- 6. **Incomplete Risk Assessment Summaries** The risk assessment summaries lack context and, therefore, do not accurately convey risk assessment conclusions. Regarding human health, for example, there is no discussion of any exposure scenarios other than fish consumption and more information is needed to help the reader understand the infant

scenario. Regarding ecological risks, for example, the stand alone statements misrepresent risk conclusions without more explanation, the few points presented are not necessarily useful for making risk management decisions in the FS, and none of the important considerations behind these conclusions addressed in the Baseline Ecological Risk Assessment uncertainty sections are discussed.

REFERENCES

EPA, 2002. Transmittal of Policy Statement: "Role of Background in the CERCLA Cleanup Program." From Michael B. Cook, Director of Office of Emergency and Remedial Response to Superfund National Policy Managers Regions 1 – 10. OSWER 9285.6-07P. May 1, 2002, Washington, D.C.

EPA, 2005. Contaminated Sediment Remediation Guidance for Hazardous Waste Sites. EPA 540-R-05-102. OSWER 9355.0-85. December 2005. Washington, D.C.